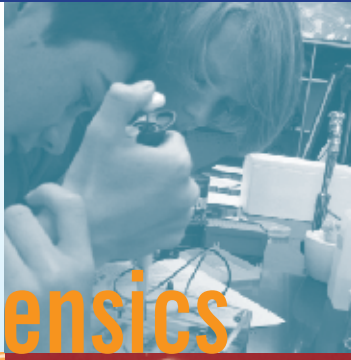


Summer Career Academies 2012

at Piedmont Virginia Community College
For Rising 7th, 8th and 9th Graders

Design
Forensics



Engineering
Arts




Computers
Health



JUNE 18 - AUGUST 10, 2012

**PIEDMONT
FUTURES**
Connecting Commerce to Classroom


WorkforceServices
.....
THE HIRE EDUCATION CENTER @ PVCC


PVCC
PIEDMONT VIRGINIA
COMMUNITY COLLEGE
Opportunity. Access. Excellence.



Have fun while you learn!

- Students may enroll weekly from June 18-August 10.
- Academies offer hands-on, project-based learning led by PVCC faculty and area professionals.
- Field trips include U.Va. and area businesses.
- Students learn about careers, college and more!
- Academies are for rising 7th-9th graders and take place at PVCC (unless otherwise noted).

“My favorite part was meeting new people.”

— Student, Summer Career Academies 2011

To sign up, use the registration form on the back page.

Questions? Call 434.961.5354 or email workforce@pvcc.edu.

Visit our Web site for the latest listings: www.pvcc.edu/academies.

Depending on available funding, financial assistance may be available for students who are unable to pay tuition. Please contact PiedmontFutures@pvcc.edu for information.

PVCC does not discriminate on the basis of race, color, religion, national origin, political affiliation, disability, veteran status, gender, age or sexual orientation in its programs and activities. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Vice President for Instruction and Student Services, 501 College Dr., Charlottesville, VA 22902; 434.961.5206.

Acting for Film

Lights! Camera! Action! Want to be a film actor? You'll have a blast in this workshop learning script analysis, experiencing moment-to-moment acting techniques, performing for the camera and establishing a confident performance through the pursuit of dramatic intention. You'll be assigned a scene from a Hollywood movie to develop a character, work with scene partners and perform on camera. Robert Wray is a teacher, playwright and actor, with appearances in numerous films and New York City theater productions.

M-F 6/25-6/29 8:30 a.m.-4:30 p.m.



Student conducts a lab experiment.

Architecture: Design Your Own Room

NEW

If you could design your very own room, what would it look like? Dream big, then design it in detail! Create architectural drawings by hand, build a physical 3-D model, and then create a virtual model with Google SketchUp. Visit Monticello and the U.Va. School of Architecture to see the differences between modern architecture and historic building design. Learn from area professionals who work in the field of architecture and design. Instructor Valerie Magolan has a background in architecture with experience as a historic preservation consultant.

M-F 7/30-8/03 8:30 a.m.-4:30 p.m.

Art: From Drawing to Design

Do you like to draw and design? Do you want to take your talents to the next level? Use traditional drawing techniques to create a self-portrait, still life or landscape. Scan your creation into Photoshop and colorize, edit and manipulate. Create a logo in Illustrator and put it all together in a poster using InDesign. Learn how to market your work through online and social media and explore what it takes to have a successful career through field trips and guest speakers. Mike Uriss is a commercial artist, art instructor and fine artist.

M-F 7/30-8/03 8:30 a.m.-4:30 p.m.

Biology Experiments: Mad Scientist

Can you determine the flavor of a jellybean with your eyes closed? Explore biology on the cellular, organismal and ecological levels. Extract DNA from strawberries. See how the wavelength of light affects the rate of photosynthesis in plants. Work with bluegill fish to see if they prefer large or small prey. Investigate senses such as sight, sound, smell and taste using yourself as a test subject. Mark Lewis is a biology teacher and has developed curricula for applied laboratory biology courses in a variety of educational settings.

M-F 7/09-7/13 8:30 a.m.-4:30 p.m.
M-F 7/16-7/20 8:30 a.m.-4:30 p.m.

Board Game Design

Do you want to learn the strategies behind your favorite board games and design your own game? Learn the history and development of abstract games (*Chess, Checkers*), card games, family games (*Monopoly, Settlers of Catan*) and role-playing games while playing them with other game enthusiasts. Create and teach others your own strategic board game. Experiment with electronic tools of game design. Learn about careers in the electronic and board game industries. Play games from the instructor's extensive collection of 200+ games. PVCC English Professor Bruce Glassco recently published a new board game, *Betrayal at House on the Hill*.

M-F 6/25-6/29 8:30 a.m.-4:30 p.m.

Chemistry Experiments: Take the Magical Chem-Mystery Tour!

NEW

What is the connection between atoms, Einstein, pollen and... wait for it... nanotechnology? Can you "see" electrons? What does radioactivity have to do with ancient artifacts? Run your clock with a potato (or a lemon)! Make ice cream from liquid nitrogen! Learn about the gimmicks of chemists and the mysteries of chemistry through hands-on experiments in the PVCC chemistry lab and field trips to surprising places. Frances Rees teaches chemistry at PVCC.

M-F 8/06-8/10 8:30 a.m.-4:30 p.m.

"He is learning new things and having fun at the same time."

— PARENT OF BIOLOGY STUDENT

Computers:

Building a Computer from Parts

Can you count to two? If yes, then you can build a complete computer system from parts and load the operating system! Learn about computer system fundamentals including the binary number system and logic gates, the elements of any computer system and operations at a basic level. Explore careers in information technology during field trips and workshops with professionals in the industry. Mark Fitzgerald teaches electronics at PVCC.

M-F 6/18-6/22 8:30 a.m.-4:30 p.m.

Computer Science I: Create Your Own App

Do you like to create games and images on the computer? Have you ever wanted to design your own computer program? Design a sound and animation project with Alice 3-D software! Learn programming skills through a number of short workshops designed to help you get started on your own projects. Hear what it takes to be a successful programmer from professionals who have made it in the industry. You will go on field trips to U.Va. and area businesses to see the latest computer technology in action. Kelly Shott is a computer science tutor at PVCC.

M-F 6/18-22 8:30 a.m.-4:30 p.m.
M-F 6/25-6/29 8:30 a.m.-4:30 p.m.

Computer Science II: Create a PC Game!

NEW

Do you like computer games? Now you can design your own games to play! You will create several computer games including a scrolling shooter game, a maze game and a platform game! Learn the basic elements of computer games including story line, rules, graphics, level design and packaging. Use sounds and music, timing, collision detection and reaction to enhance your games. Go on field trips and talk to professionals in the game design industry. David Duvall-Early teaches computer science at PVCC. Students enrolling in this course must first take Computer Science I, Create Your Own App.

M-F 7/23-7/27 8:30 a.m.-4:30 p.m.

“The field trips were great!”

— PARENT OF COMPUTER SCIENCE STUDENT

**“It was cool to create software
with other software.”**

— COMPUTER SCIENCE STUDENT

Dance, Dance, Dance!

NEW

Do you love to dance? In this Academy, you will take classes in modern dance, including technique, stretching and improvisation. Learn about the rich history of dance and work together to choreograph a dance to perform. Explore the connection between dance and costume design, sculpture, visual arts and language with workshops by professionals in related fields. Anne Megibow teaches dance at PVCC. Beginner dancers welcome. Academy takes place at Studio 20 at the McGuffey Art Center, 201 2nd Street Northwest, Charlottesville.

M-F 8/06-8/10 8:30 a.m.-4:30 p.m.

Engineering: Island Challenge

NEW

You are deserted on a tropical island with your friends and must engineer your way back to safety. Learn how to create a safe drinking water system using limited supplies! Cook lunch in a solar oven that you design! Learn how to use the forces of buoyancy and surface tension to transport your cargo across the ocean. Visit U.Va. and learn about scientific discoveries to help you escape from the island at last. Susan Donohue is an adjunct faculty member at U.Va. and works with the Virginia Middle School Engineering Education Initiative.

M-F 7/23-7/27 8:30 a.m.-4:30 p.m.

Geospatial Engineering:

NEW

Learn the Technology behind GPS!

Make your own maps using GPS (Global Positioning System)! Take data points and update maps in Google Earth, and make your own maps using data you collect. Use 3-D analysis software to measure trees and to determine good sites for solar energy collectors. Learn about the future of geospatial engineering from career speakers and field trips, including U.Va., Albemarle County GIS, and the Virginia Department of Forestry. John Scrivani is geospatial projects manager at Virginia Geographic Information Network and has taught at U.Va., PVCC, Virginia Tech and the University of Richmond.

M-F 7/16-7/20 8:30 a.m.-4:30 p.m.

Fabulously Fun Photography NEW

Do you like to create your own images? Do you want to learn how to express yourself with creative photography? Come explore the tools of your digital camera! Discover a bird's-eye and bug's perspective, frame light and shadow, play with texture, line and repetition. Explore aperture and shutter speed, process pixels in Photoshop, create a photo Web blog and prepare your favorite shots to print and frame! Discuss careers in photography with professionals in the field. Stacey Evans teaches photography at PVCC and owns Stacey Evans Photography.

M-F 7/09-7/13 8:30 a.m.-4:30 p.m.

Fashion Design: You look MAHALOUS!

Find your own style and design a virtual line of clothing! Learn to draw the human figure for fashion design, gesture drawing and painting. Use watercolor and pencil with confidence. Learn about textiles and how to incorporate their details into your drawings. Guest speakers and field trips will include a design business, a theater department and fashion entrepreneurs. Kimberly Ramberg is a sewing and fashion design instructor for children and adults at Les Fabriques.

M-F 7/30-8/03 8:30 a.m.-4:30 p.m.
M-F 8/06-8/10 8:30 a.m.-4:30 p.m.



*Students
check
blood
pressure.*

Forensics I: CSI Charlottesville

Ever wanted to be an investigator on CSI? Learn how to collect and examine evidence and participate in hands-on analyses of fibers, impressions, fingerprints, fake blood and pseudo drugs. Take a virtual visit to the Body Farm, watch a video presentation of an autopsy and see presentations by professionals who work in the field. Presentation of graphic material is inherent to the course; every attempt will be made to present only simple views of dead bodies. Dr. Lyn van der Sommen is a former medical examiner and directs PVCC Workforce Services health-care programs. Cameron Rodish is a PVCC career coach. Forensics tool box included.

M-F 7/16-7/20 8:30 a.m.-4:30 p.m.
M-F 7/23-7/27 8:30 a.m.-4:30 p.m.

Forensics II: Advanced CSI NEW

Are you ready for greater adventure in crime scene investigations? Examine evidence in more detail, including (fake) blood, DNA and documentation. Study a crime scene, collect evidence and present findings as part of an investigative team. Visit a morgue and an anatomy lab. You will solve a new mystery every day, hear presentations from investigators, and learn about the future of forensics. Dr. Lyn van der Sommen is a former medical examiner and directs PVCC Workforce Services health-care programs. Cameron Rodish is a PVCC career coach. Students in this course must take first take Forensics I: CSI Charlottesville.

M-F 7/30-8/03 8:30 a.m.-4:30 p.m.

**"I can tell the class held her attention
and sparked an interest in her."**

— PARENT OF FORENSICS STUDENT

Health Sciences: Saving Lives

Do you want to help save lives? Become certified in first aid and CPR. Learn how to perform a hand and ankle x-ray. Figure out how much "medicine" to give a patient who's having heart trouble. Practice removing "bloody" medical gloves without contaminating yourself. Enjoy behind-the-scenes field trips to area medical facilities. Learn essential skills for working in a variety of health professions, including radiology, nursing, surgical technology, biology and allied health and emergency medicine. Taught by PVCC faculty. CPR and first aid certification included.

M-F 6/18-6/22 8:30 a.m.-4:30 p.m.
M-F 6/25-6/29 8:30 a.m.-4:30 p.m.

Neuroscience: Be Brainy! NEW

How does your brain work? Come find out! You will make clay brain and neuron models, conduct and participate in memory and learning tests and use microscopes to view neurons! Use your inquiry skills to role-play a neurosurgeon, troubleshoot the challenges of separating conjoined twins and discover how to read MRI and other imaging examples. You will learn about "brain-related" careers at U. Va. and talk with professionals who work in the field. Carrie Pledger is a former teacher and current research specialist in the Department of Neuroscience at U.Va.

M-F 7/23-7/27 8:30 a.m.-4:30 p.m.
M-F 8/06-8/10 8:30 a.m.-4:30 p.m.

Robotics:

Build and Program a Robot!

NEW

Build and program a Lego NXT® robot that can move on wheels! Learn about gears, electric motors and sensors. Attach light sensors, ultrasonic sensors, sound sensors and touch sensors to your robot, and program your robot to react to its environment. Work in teams to program a robot that can follow a path and chase or avoid other robots. Visit a mechanical engineering research lab at U.Va. and talk with professionals in the field. Robert Dickerson is a doctorate student in computer science at U.Va.

M-F 7/16-7/20 8:30 a.m.-4:30 p.m

Robotics:

Everything's Under Control!

NEW

Do you like operating remote-control objects? Build and program Lego NXT® robots that control themselves! This hands-on class will introduce you to the technology behind automatic controls. Learn how stability affects control and how to maximize the stability of a moving system. Build wheeled vehicles with a yardstick and angle sensor, and tune the control to keep the yard stick vertical. Enjoy field trips and guest speakers that show you the wide field of robotics and systems engineering. Charlie Owen is an engineer at Northrop Grumman.

M-F 7/09-7/13 8:30 a.m.-4:30 p.m..

Theater Improvisation:

Make It Up as You Go!

NEW

Do you like to act in the moment? If yes, then Theater Improvisation is for you! During this action-packed week, you will play theater games involving voice, movement and improvised scene work. You'll learn about careers related to theater, as well as set and light design. At the end of the week, you'll be ready to work with your classmates to present an improvised scene based on audience suggestions. Mary Coy is an actor and director specializing in Shakespeare and has taught acting, theater and voice at schools and universities around the U.S.

M-F 6/18-6/22 8:30 a.m.-4:30 p.m.

Information about the Summer Career Academies brochures is distributed to students through mailings, at community events and through areas schools. Albemarle County Public Schools does not discriminate on the basis of race, color, religion, age, sex, disability, national origin, pregnancy, or marital status. Questions or concerns regarding compliance with the School Division's nondiscrimination policies may be directed to: Director of Human Resources, 401 McIntire Road, Charlottesville, VA 22902; Phone: 434 296-5827.

"My favorite part was being able to make our own TV shows."

— TV PRODUCTION STUDENT

Stand-Up Comedy:

Why Did the Chicken Cross the Road?

NEW

Capture people's attention and hit their funny bones! Learn how to write and perform riddles and jokes, including useful joke formulas, timing and facial expression techniques. Develop characters, use your voice in surprising ways, learn how to imitate others and create and perform your own stand-up routine with the help of your comedian friends! Guest speakers will include professional comedians. All course content will be family friendly. John McCullough is a speech and drama instructor at Woodberry Forest School and has directed improv troupes and written and performed comedy for over 10 years.

M-F 7/09-7/13 8:30 a.m.-4:30 p.m.



Students produce a TV show.

TV Production:

Produce Your Own Show!

Do you want to create your own TV show? Write, record and produce your own TV programs for showcase on Charlottesville Public Access Television. Work with professional-grade video equipment, see how to operate a broadcast television studio and review the history of television. Field trips to area TV stations will give you an overview of professional options in the field. You will become a certified CPA-TV Producer, giving you access to the studio and equipment to continue making shows for broadcast. Calvin Tate directs the Charlottesville Community Access TV station. Academy takes place at Charlottesville Public Access TV, 1000 East Rio Rd.

M-F 7/16-7/20 8:30 a.m.-4:30 p.m.



“The best part was exposure to a career path he didn’t know about.”

– PARENT, SUMMER CAREER ACADEMIES 2011

Summer Career Academies @ PVCC Registration Form

Student's (Child's) Name: _____

School _____ Male Female Grade level (2012 / 2013) _____

Date of Birth: ___/___/___ Social Security #: _____

Parent's Name: _____ Phone _____

E-mail Address: _____

Address: _____

City: _____ State: _____ Zip: _____

Student's ethnicity:

- Hispanic or Latino Black/African-American Asian American Indian/Alaska Native
 Native Hawaiian/Other Pacific Islander White Choose not to specify

Student has a parent who has served in the U.S. Military Yes No

Is the student a U.S. citizen? Yes No If no, country of citizenship: _____

Permanent Status: Resident alien Asylee Refugee A#: _____

What is the student's current immigration status with the U.S.? Not in U.S. I am requesting visa status. Currently in U.S.

Method of payment: Check Money Order Visa MasterCard AMEX Billing Zip Code: _____

Card No.: _____ - _____ - _____ - _____ Exp. Date: _____ / _____

Name on Card: _____

Signature: _____ Total Amount Enclosed \$ _____

Where did you hear about the Academies? Brochure from school Other: _____

Please indicate class selections by checking the appropriate box(es):

	Title	Date	Course No.	Time	Fee
<input type="checkbox"/>	Computer Science I: Create Your Own App!	6/18-6/22	29915	8:30 a.m.-4:30 p.m.	\$249
<input type="checkbox"/>	Health Sciences: Saving Lives	6/18-6/22	29913	8:30 a.m.-4:30 p.m.	\$269
<input type="checkbox"/>	Theater Improvisation: Make It Up As You Go!	6/18-6/22	29914	8:30 a.m.-4:30 p.m.	\$249
<input type="checkbox"/>	Building a Computer from Parts	6/18-6/22	29916	8:30 a.m.-4:30 p.m.	\$269
<input type="checkbox"/>	Computer Science I: Create Your Own App!	6/25-6/29	29936	8:30 a.m.-4:30 p.m.	\$249
<input type="checkbox"/>	Health Sciences: Saving Lives	6/25-6/29	29919	8:30 a.m.-4:30 p.m.	\$269

MORE CLASS OPTIONS ON PAGE 8

Please indicate class selections by checking the appropriate box(es):

	Title	Date	Course No.	Time	Fee
<input type="radio"/>	Acting for Film	6/25-6/29	29934	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Board Game Design	6/25-6/29	29935	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Biology Experiments: Mad Scientist	7/09-7/13	29952	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Robotics: Everything's Under Control	7/09-7/13	29951	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Fabulously Fun Photography	7/09-7/13	29950	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Stand-Up Comedy: Why Did the Chicken Cross the Road?	7/09-7/13	29955	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Biology Experiments: Mad Scientist	7/16-7/20	29970	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Robotics: Build and Program a Robot	7/16-7/20	29978	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Geospatial Engineering: Learn the Technology behind GPS!	7/16-7/20	29979	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	TV Production	7/16-7/20	29971	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Forensics I: CSI Charlottesville	7/16-7/20	30002	8:30 a.m.-4:30 p.m.	\$259
<input type="radio"/>	Neuroscience: Be Brainy!	7/23-7/27	29987	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Computer Science II: Create a PC Game!	7/23-7/27	29986	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Engineering: Island Challenge	7/23-7/27	29988	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Forensics I: CSI Charlottesville	7/23-7/27	29989	8:30 a.m.-4:30 p.m.	\$259
<input type="radio"/>	Art: From Drawing to Design	7/30-8/03	30001	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Fashion Design: You Look MAHALOUS!	7/30-8/03	30003	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Architecture: Design Your Own Room	7/30-8/03	30005	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Forensics II: Advanced CSI	7/30-8/03	30008	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Dance, Dance, Dance!	8/06-8/10	30006	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Neuroscience: Be Brainy!	8/06-8/10	30007	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Fashion Design: You Look MAHALOUS!	8/06-8/10	30009	8:30 a.m.-4:30 p.m.	\$249
<input type="radio"/>	Chemistry Experiments: Take the Magical Chem-Mystery Tour!	8/06-8/10	30013	8:30 a.m.-4:30 p.m.	\$249

Please return completed registration form to:

PVCC Workforce Services Piedmont Futures 501 College Drive Charlottesville, VA 22902

PH: 434.961.6503 FAX: 434.961.5270

Payment must be received at time of registration.

CANCELLATIONS: Workforce Services reserves the right to cancel any class. **REFUNDS:** Participants may withdraw from a class up to five (5) business days before that class is scheduled to begin and receive a full refund. No refunds will be provided after this time. Refund requests must be made in writing by mail, fax or email (include your name, class title, and reason for refund). **NOTICE:** In compliance with the sex offender and crimes against minors' registry, a portion of this information will be submitted to the Virginia State Police.